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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,847	03/16/2004	Junji Suctsugu	1248-0706PUS1	1286

2292 7590 03/20/2007  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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AFSHAR, KAMRAN

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/20/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/20/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/800,847

Applicant(s)

SUETSUGU, JUNJI

Examiner

Kamran Afshar, 571-272-7796

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/16/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/16/04 &amp; 05/16/06</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In accordance with the claimed language, the claimed invention is directed to description or expression of the programs, which are not physical "things". They are neither computer components nor statutory processes. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. In contrast, a claimed computer readable medium encoded with a computer program, i.e. instruction, is a computer element, which defines structural and functional interrelationships between computer program and the rest of computer, which permits the computer program's functionality to be realized, and is thus statutory. See *Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)*

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claims 1, 4, 7-11, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 2-3, 5-6 are rejected as they are directly and or indirectly depended on rejected claim(s).

5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "storing detection information", does not reasonably provide enablement for generating detection information

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6. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. It is seen how the storage unit storing detection information, but it is not seen how generating detection information:

7. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 4, 9, recites word(s) "communication means for exchanging the detection information with an outside", "from an outside", "to the outside".

Appropriate correction is required.

#### ***Drawings***

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "to reduce a total number of nodes operating in the master mode", "master selecting means", "construction means", "first searching means", "second first searching means", "repeating means", "determining means", must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Allowable Subject Matter***

9. Claims 1-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and rejection under 35 U.S.C. 101, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: 1-11.

With respect to claims 1, 10, Admitted Prior Art (APA) is the closest prior art to the application invention, which discloses a network reconfiguration method for reconfiguring a network including a plurality of sub-networks each including a node operating in a master mode and at least one node operating in a slave mode and being linked with the node operating in the master mode (See e.g. Page 13, Line 2 – Page 14, Line 17, Figs. 1a-1c).

Tanada discloses a positional relationship between a master terminal and a slave terminal and the positional relationship of the slave terminal with the master terminal and with other slave terminals are measured, and a slave terminal subject to switching to master terminal is selected using the positional relationship. A network is then reconstructed with the slave terminal subject to switching selected in this manner as the new master terminal (See e.g. Abstract, Co. 3, Line 64 – Co. 4, Line 11, Figs. 1-19).

However, the prior art of record fails to disclose singly or in combination or render obvious that the network reconfiguration method comprising the steps of: (i) causing each node to detect a linkable node; (ii) generating detection information including a result of detection in the step (i); (iii) with reference to the detection information generated in the step (ii), selecting a node becoming the node operating in the master mode, reducing a total number of nodes operating in the master mode; and (iv) constructing a sub-network including the node selected in the step (iii).

With respect to claim 4, the prior art of record fails to disclose singly or in combination or render obvious that comprising: detection means for detecting a linkable node; storage means for storing detection information which includes a result of detection of the node, which is obtained by the detection means, and results of detections of other nodes constituting a network including sub-networks including

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said sub-network; communication means for exchanging the detection information; master selecting means for selecting, with reference to the detection information, a node becoming the node operating in the master mode, reducing a total number of nodes on the network operating in the master mode; and construction means for constructing a sub-network by selecting a mode of the node and selecting a target node to be linked with, with reference to a selection by the master selecting means.

With respect to claim 7, the prior art of record fails to disclose singly or in combination or render obvious that the link change method comprising the steps of: (i) detecting a linkable node; (ii) receiving, from an outside, detection information including results of detections of other nodes constituting a network including sub-networks including said sub-network; (iii) updating the received detection information with reference to a result of detection of the node, which is obtained in the step (i); (iv) to the outside, sending the detection information updated in the step (iii); (v) with reference to the detection information updated in the step (iii), selecting a node becoming the node operating in the master mode, reducing a total number of nodes operating in the master mode; (vi) based on a selection in the step (v), selecting a mode of the node and selecting a target node to be linked with; and (vii) if the target node selected in the step (vi) is different from a current target node, switching the target node.

With respect to claim 8, the prior art of record fails to disclose singly or in combination or render obvious that the network reconfiguration method including the steps of: (i) causing each node to detect a linkable node; (ii) generating detection information including a result of detection in the step (i); (iii) with reference to the detection information generated in the step (ii), selecting a node becoming the node operating in the master mode, reducing a total number of nodes operating in the master mode; and (iv) constructing a sub-network including the node selected in the step (iii).

With respect to claims 9, 11, the prior art of record fails to disclose singly or in combination or render obvious that the method including the steps of: (i) detecting a linkable node; (ii) receiving, detection information including results of detections of other nodes constituting a network including sub-networks including said sub-network; (iii) updating the received detection information with reference to a result of detection of the node, which is obtained in the step (i); (iv) sending the detection information updated in the step (iii); (v) with reference to the detection information updated in the step (iii), selecting a

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node becoming the node operating in the master mode, reducing a total number of nodes operating in the master mode; (vi) based on a selection in the step (v), selecting a mode of the node and selecting a target node to be linked with; and (vii) if the target node selected in the step (vi) is different from a current target node, switching the target node.

**Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Johnsson (U.S. Pub. No.: 2002/0044549 A1).

b) Choi (U.S. 6,859,656 B2).

c) Joon-Bo (U.S. Pub. No.: 2002/0055978 A1).

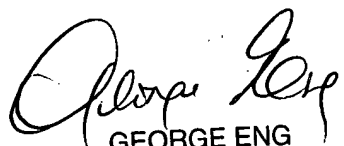
d) Choi (U.S. 6,879,570 B1).

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Eng, George can be reached @ (571) 272-3984. The fax number for the organization where this application or proceeding is assigned is **571-273-8300** for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Kamran Afshar**

  
**GEORGE ENG**  
**SUPERVISORY PATENT EXAMINER**